



Cambridge International AS & A Level

CANDIDATE
NAME



CENTRE
NUMBER

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CANDIDATE
NUMBER

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INFORMATION TECHNOLOGY

9626/12

Paper 1 Theory

October/November 2024

1 hour 45 minutes

You must answer on the question paper.

No additional materials are needed.

INSTRUCTIONS

- Answer **all** questions.
- Use a black or dark blue pen.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.
- You may use an HB pencil for any diagrams, graphs or rough working.
- Calculators must **not** be used in this paper.

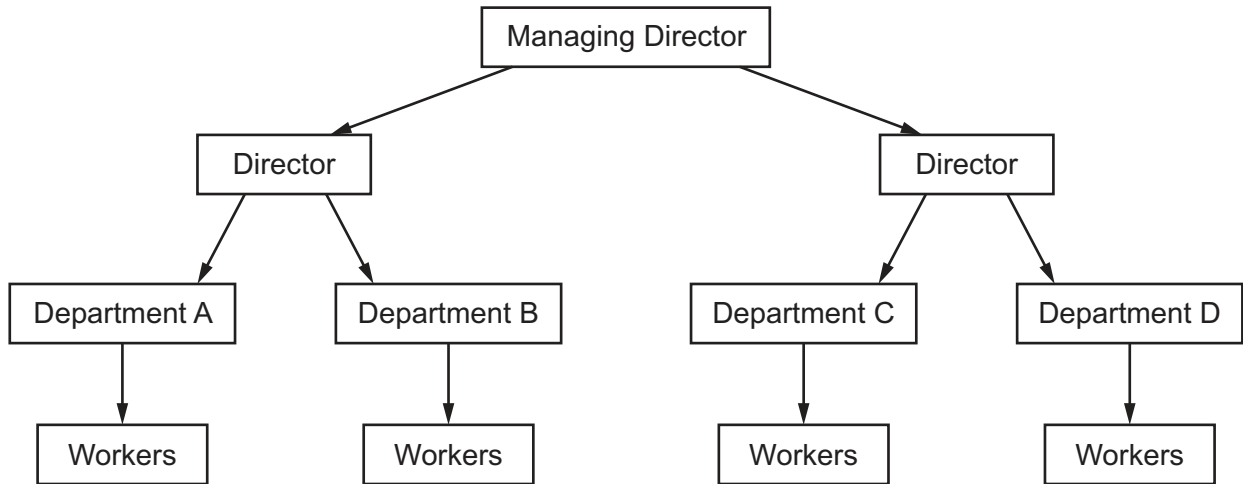
INFORMATION

- The total mark for this paper is 70.
- The number of marks for each question or part question is shown in brackets [].

This document has **12** pages. Any blank pages are indicated.



- 1 A company uses the following hierarchical staffing structure.



The company stores all its staff records in a hierarchical database.

- (a) Explain what is meant by a hierarchical database management system.

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..... [3]

- (b) Describe how the company's hierarchical database would be used to store all the staff records.

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..... [3]





2 The quality of information can affect the usefulness of decisions made by businesses.

Describe how the following factors can affect the quality of information and the quality of the decisions made.

(a) age of information

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..... [2]

(b) relevance of information

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..... [3]





4 Draw a program flowchart to represent this algorithm:

- Input an integer value.
- Repeat this until you have entered 20 values.
- At the end, output the largest value and the average of the values.

[7]



..... [6]

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[6]



- 7 Explain why personal information should be kept confidential. Your answer must include examples of how personal information can be used if it is **not** kept confidential.

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..... [4]

- 8 A furniture company uses databases in its warehouse to help with stock control.

(a) The company has a Product database which contains the fields shown in the table.

Field Name	Data Type	Example of Data
Number_in_Stock		199 (Number_in_Stock can vary between a minimum of 0 and a maximum of 250.)
Location		07.44.03
Reorder_Level		250
Price		\$203.50
Supplier_Telephone_No.		07700900819

Complete the Data Type column in the table by writing the most appropriate data type for each field. For any numeric fields, specify the numeric data type. [5]



[6]

[6]

..... [5]

[5]

Discuss the benefits and drawbacks of using telephone interviews.

[8]

[8]



10 Scientists are using an expert system to help them identify species of animals.

Describe **four** benefits to the scientists of using an expert system for this purpose.

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[4]





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